

# State Reservoir Priority and Development Program

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# Louisiana State Senate Natural Resources Committee

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# **Severe Drought in 1998 - 2000 Raised Water Awareness**





- Saltwater encroachment accelerated
- Ground water levels continued to decline
- Economic growth concerns grew

## The Legislature Responded

- Received requests to fund reservoir projects
- No formal evaluation or prioritization of projects to determine best use of state funds
- Recognized need for <u>process</u> and <u>procedures</u> to prioritize and fund reservoirs
- In 2007 authorized DOTD to establish a Reservoir Priority Development Program

## **RPDP Participating Agencies**



























## **RPDP Goals**

### Encourage Multiple-Purpose Projects

- Select projects that promote State priorities
- Water supply, flood control, environmental enhancement, socioeconomic development, recreation, etc.

### Provide Tools for Applicants and Decision Makers

- Consistent summary of state-wide water resource issues
- Sound scientific criteria for decisions
- Build on similar approaches from other agencies and states

## Provide Guidance on State Water Resource Management Strategies

### Phase 1 of RPDP has 4 Elements

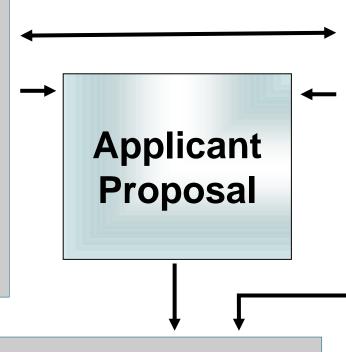
# **Applicant Guidelines**

#### **Evaluation Criteria**

- Engineering
- Economic
- Environmental

#### **Evaluation Guidelines**

- Forms
- Procedures



#### **Basin Reports**

#### **Water Availability and Use**

- Surface Water
- Groundwater

#### **Water Resources Issues**

- Water Supply and Quality
- Environmental Protections
- Economic Development
- Legal Agreements

**Needs Assessments** 

Statewide Perspective on Water Resources

#### **Reviewer Guidelines**

**Scoring and Prioritization** 



**Evaluation Process** and Criteria

# Basin Characterization Reports Provide Consistent Information Statewide

### Water Availability and Use

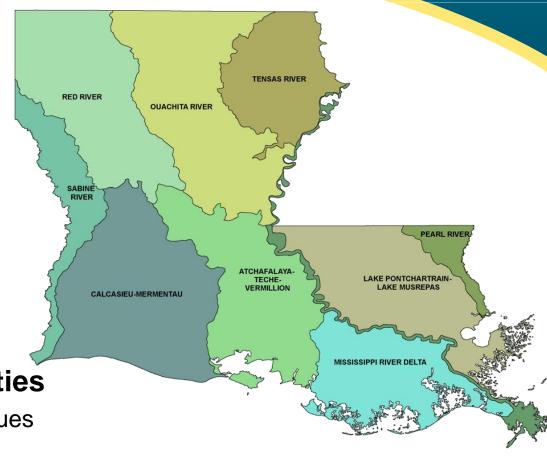
- Surface Water
- Groundwater

#### Water Related Issues

- Water quality
- Groundwater Overdraft
- Environmental and Cultural
- Flooding
- Recreation
- Navigation
- Hydropower

### Land Use and Legal Entities

- Inter-basin and Inter-state Issues
- Needs Assessments



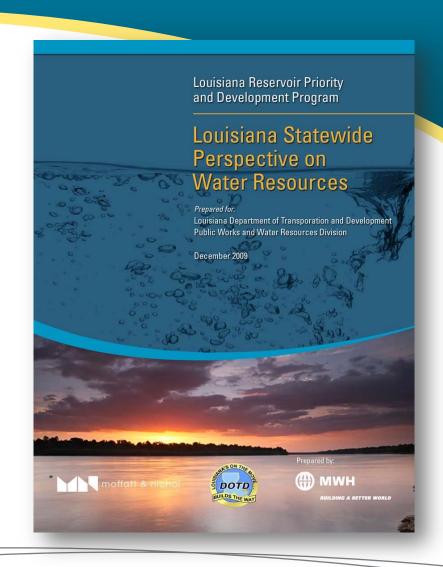
# Water Resources Needs Were Ranked Based on Relative Urgency

## Major water resource needs within each basin

- Surface water supply / quality
- Ground water supply / quality
- > Environmental protection / enhancement
- > Flood control / recreation / navigation

## Statewide Perspective on Water Resources

- Summary of Statewide water resource issues
  - Areas of groundwater concern
  - Areas of changing water demand
  - Declining water quality
- Strategies for water resource management



# Water Resources Management Statewide Issues and Concerns

- Groundwater over pumping
- Limited information on surface water sustainable yield
- Population and water use forecast uncertainty
- Other future water demands
  - Agriculture
  - Industry
  - Energy
  - Environment

## Recommended Water Resources Management Strategies

- > Build on existing resources
  - Coordinate activities of state agencies
- Work with local entities for regional solutions
  - Water conservation and education
  - Alternative water sources
  - Intra-basin transfers
- Adopt collaborative vs. regulatory approaches
- > Apply scenario-based planning
- Prepare regular updates

## **Next Steps in RPDP Development**

- > Pilot testing and stakeholder input
- Estimate sustainable yield of streams, reservoirs and lakes
- > Identify potential reservoir locations
- Quantify stream flood characteristics
- > Develop ground and surface water models

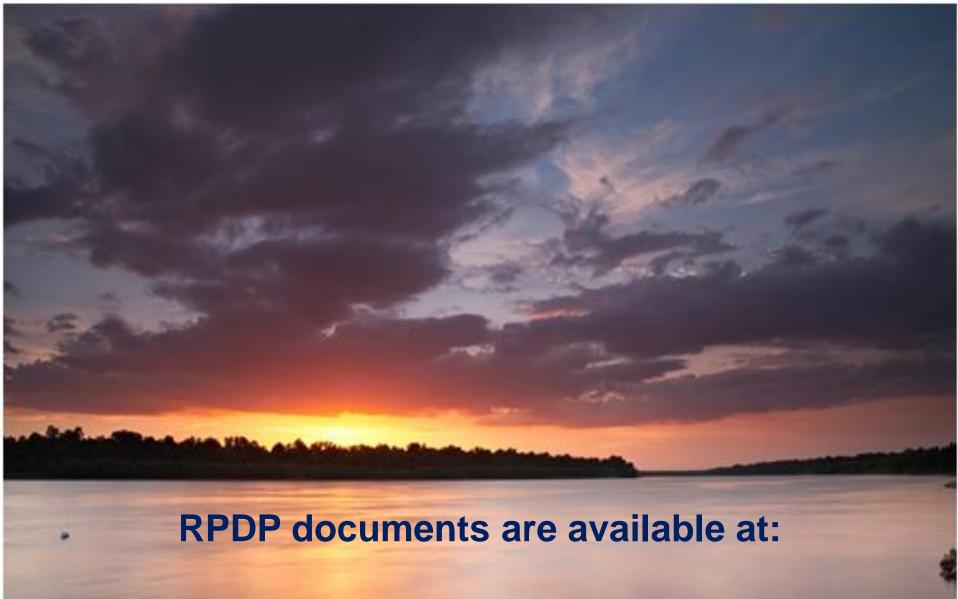
## **Observations Made During RPDP Phase 1**

#### Louisiana Lacks a State Water Resources Plan

- Historical abundant supply has masked the need
- Local water resources issues have been growing
- Water management challenges will increase

### Regional water needs must be determined

- Identify areas of current and future water shortage
- Quantify 'surplus' water supply to a region
- What are potential uses of surplus water?



http://www.dotd.la.gov/intermodal/dams/rpdp\_reports.aspx